3. RELATIONSHIP BETWEEN ISO AND PARTICIPATING TOS.

3.1 Nature of Relationship.

Each Participating TO shall enter into a Transmission Control Agreement with the ISO. In addition to converting Existing Rights in accordance with Section 2.4.4.2, New Participating TOs will be required to turn over Operational Control of all facilities and Entitlements that: (1) satisfy the FERC's functional criteria for determining transmission facilities that should be placed under ISO Operational Control; (2) satisfy the criteria adopted by the ISO Governing Board identifying transmission facilities for which the ISO should assume Operational Control; and (3) is the subject of mutual agreement between the ISO and the Participating TOs. The ISO shall notify Market Participants sixty (60) days in advance of any associated revision of the High Voltage Access Charge and that a New Participating TO has executed the Transmission Control Agreement and the date, either January 1 or July 1, that the revised High Voltage Access Charge shall be effective.

3.1.1 In any year, a Participating TO applicant must declare its intent in writing to the ISO to become a New Participating TO by January 1 or July 1. Applicable agreements will be negotiated and filed with the Federal Energy Regulatory Commission no later than April 1 or October 1 for the New Participating TO to be effective the following July 1 or January 1, respectively.

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

First Revised Sheet No. 121 Replacing Original Sheet No. 121

TO shall become a Scheduling Coordinator or obtain the services of a Scheduling	
Coordinator that has been certified in accordance with Section 2.2.4, which	

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000 Scheduling Coordinator shall not be the entity's Responsible Participating TO in accordance with the Responsible Participating Transmission Owner Agreement, unless mutually agreed, and shall operate in accordance with the ISO Tariff and applicable Agreements. The New Participating TO shall assume responsibility for paying all Scheduling Coordinators charges regardless of whether the New Participating TO elects to become a Scheduling Coordinator or obtains the services of a Scheduling Coordinator.

3.2 Transmission Expansion.

A Participating TO shall be obligated to construct all transmission additions and upgrades within its Service Area that are determined to be needed in accordance with the requirements of this Section 3.2. A Participating TO's obligation to construct such transmission additions and upgrades shall be subject to: (1) its ability, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism with cost responsibility assigned in accordance with Section 3.2.7. The obligations of the Participating TO to construct such transmission additions or upgrades will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of the TO's obligations under this ISO Tariff or as those rights may be conferred by the ISO or may arise or exist pursuant to this ISO Tariff.

3.2.1 Determination of Need.

The ISO, a Participating TO, or any other Market Participant may determine the need for and propose a transmission system addition. A transmission addition or upgrade is

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

ORIGINAL VOLUME NO. I	Original Sheet No. 121-A
determined to be needed where it would promote	
system reliability as set forth below.	

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000

- (a) a share of any Congestion Charges for the use of a Congested Inter-Zonal Interface of which the transmission addition or upgrade forms part in the proportion that the incremental transmission capacity of the Inter-Zonal Interface the cost of which has been allocated to it bears to its total transmission capacity
- 3.2.7.4 Once a New Participating TO has executed the Transmission

 Control Agreement and it has become effective, the cost for New High Voltage

 Facilities for all Participating TOs shall be included in the ISO Grid wide

 component of the High Voltage Access Charge in accordance with Schedule 3

 of Appendix F. The Participating TO who is supporting the cost of the New High

 Voltage Facility shall include such costs in its High Voltage Transmission Revenue

 Requirement, regardless of which TAC Area the facility is geographically located.
- 3.2.8 Ownership of and Charges for Expansion Facilities.
- 3.2.8.1 All transmission additions and upgrades constructed in accordance with this Section 3.2 shall form part of the ISO Controlled Grid and shall be operated and maintained by a Participating TO in accordance with the Transmission Control Agreement.
- 3.2.8.2 The Participating TO which owns or operates transmission additions and upgrades constructed in accordance with this Section 3.2 shall provide access to them and charge for their use in accordance with this ISO Tariff and the TO Tariff.

Issued by: Roger Smith, Senior Regulatory Counsel

3.2.9 Expansion by "Local Furnishing" Participating TOs.

Notwithstanding any other provision of this ISO Tariff, a Local Furnishing

Participating TO shall not be obligated to construct or expand facilities, (including interconnection facilities as described in Section 8 of the TO Tariff) unless the ISO or Project Sponsor has tendered an application under FPA Section 211 that requests FERC to issue an order directing the Local Furnishing TO to construct such facilities pursuant to Section 3.2 of the ISO Tariff. The Local Furnishing TO shall, within 10 days of receiving a copy of the Section 211 application, waive its right to a request for service underFPA Section 213(a) and to the issuance of a proposed order under

Issued by: Roger Smith, Senior Regulatory Counsel

FPA Section 212(c). Upon receipt of a final order from FERC that is no longer subject to rehearing or appeal, such Local Furnishing TO shall construct such facilities in accordance with this Section 3.2.

3.3 Metered Subsystems

3.3.1 General Nature of Relationship Between ISO and MSS

- 3.3.1.1 A New Participating TO may qualify as a Metered Subsystem and may qualify itself or its designee as a MSS Operator in accordance with the Metered Subsystem Agreement. The ISO shall not be obligated to accept Schedules, Adjustment Bids or bids for Ancillary Services which would require Energy to be transmitted to or from the MSS unless the relevant MSS Operator undertakes in writing to the ISO to comply with all applicable provisions of the ISO Tariff and applicable agreements as they may be amended from time to time, including, without limitation, the applicable provisions of this Section 3.3.
- 3.3.2 Coordination of Operations. Each MSS Operator shall operate its MSS at all times in accordance with Good Utility Practice and in a manner which ensures safe and reliable operation. All information pertaining to the physical state or operation, maintenance and failure of the MSS affecting the operation of the ISO Control Area that is made available to the ISO by the MSS Operator shall also be made available to Scheduling Coordinators, provided that the ISO shall provide reasonable notice to the MSS Operator. The ISO shall not be required to make information available to the MSS Operator other than information that is made available to Scheduling Coordinators.

Issued by: Roger Smith, Senior Regulatory Counsel

3.3.3 Coordinating Maintenance Outages of MSS Facilities. Each MSS Operator shall make appropriate arrangements to coordinate Outages of Generating Units or transmission facilities forming part of its MSS that will have an effect, or are reasonably likely to have an effect, on any interconnection between the MSS and the system of another Participating TO, prior to the submission by that Participating TO of its Maintenance Outage requirements under Section 2.3.3. The ISO will coordinate Outages of other Participating TOs transmission facilities that may effect the MSS.

3.3.4 MSS Operator Responsibilities.

Recognizing the ISO's responsibility to promote the efficient use and reliable operation of the ISO Controlled Grid and the Control Area consistent with the Applicable Reliability Criteria, each MSS Operator shall:

3.3.4.1 operate and maintain its facilities, in accordance with applicable safety and reliability standards, regulatory requirements, applicable operating guidelines, applicable rates, tariffs, statutes and regulations governing their provision of service to their End-Use Customers and Good Utility Practice so as to avoid any material adverse impact on the ISO Controlled Grid, it being understood that, if the MSS Operator does not so operate and maintain its facilities and the ISO concludes, after notice is provided to the MSS Operator, that such failure impairs or threatens to impair the reliability of the ISO Controlled Grid, the ISO may suspend MSS status, in accordance with this Section 3.3, until the MSS Operator demonstrates the ability and willingness to so operate and maintain its facilities;

Issued by: Roger Smith, Senior Regulatory Counsel

- 3.3.4.2 provide the ISO Outage Coordination Office each year with a schedule of upcoming maintenance of facilities forming part of the MSS that will affect or is reasonably likely to affect the ISO Controlled Grid in accordance with Section 2.3.3.5;
- 3.3.4.3 coordinate with the ISO, other Participating TOs and Generators to ensure that ISO Controlled Grid Critical Protective Systems, including relay systems, are installed and maintained in order to function on a coordinated and complementary basis with the protective systems of the MSS, other Participating TOs and Generators;
- 3.3.4.4 be responsible for any Reliability Must-Run Generation and Voltage Support required for reliability of the MSS, including the responsibility for any costs of such Reliability Must-Run Generation, and Voltage Support and may satisfy this requirement through Generating Units owned by the MSS or under contract to the MSS:
- 3.3.4.5 be responsible for Black Start requirements for reliability of the MSS, however, if the MSS can self-provide this requirement, the MSS shall not pay its pro rata share of the Black Start requirement in accordance with Section 2.5.28.6; and
- 3.3.4.6 be responsible for Intra-Zonal Congestion Management and transmission line Outages within or at the boundary of the MSS, and all associated costs and not responsible for Intra-Zonal Congestion Management elsewhere in

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

the zone except to the exter	nt that a Scheduling Coordinator is delivering Energy

Original Sheet No. 131-B

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000

- 3.3.5 Scheduling by a MSS Operator. All Schedules submitted on behalf of a MSS Operator for the delivery of Energy and Ancillary Services to Loads connected to the MSS and for the delivery of Energy and Ancillary Services from Generating Units forming part of the MSS or System Units shall be submitted by a Scheduling Coordinator that complies with all applicable provisions of the ISO Tariff, which Scheduling Coordinator may be the MSS Operator, provided that the MSS Operator complies with all applicable requirements for Scheduling Coordinators.
- 3.3.5.1 Without limiting the foregoing, the Scheduling Coordinator for the MSS must submit gross generation information for the System Unit, Generating Unit, and information regarding imports, exports and Gross Loads to the ISO in the format and in accordance with the timelines applicable to other Scheduling Coordinators.
- 3.3.5.2 The Scheduling Coordinator for the MSS will designate, in discrete quantities and with prices for both Ancillary Services and Energy: (1) Schedules in Day-Ahead and Hour-Ahead Energy markets (including schedules for internal Generation and internal Load within the MSS), (2) bids or self-provided Schedules for Regulation, Spinning Reserve, Non-Spinning Reserve, and Replacement Reserve capacity and associated bid Energy, (3) Adjustment Bids, (4) Supplemental Energy bids, or (5) any feasible combination thereof.

3.3.6 System Emergencies.

3.3.6.1 In the event a System Emergency occurs or the ISO determines that a System Emergency is threatened or imminent, each MSS Operator shall comply with all directions from the ISO concerning the avoidance, management and alleviation of

Issued by: Roger Smith, Senior Regulatory Counsel

the System Emergency and shall comply with all procedures concerning System Emergencies set forth in the ISO Tariff.

- 3.3.6.2 During a System Emergency, the ISO and the MSS Operator shall communicate through their respective control centers and in accordance with procedures established in the agreement through which the MSS Operator undertakes to the ISO to comply with the provisions of the ISO Tariff.
- 3.3.6.3 The ISO has authority to suspend MSS control and direct, via communications with the MSS Operator, the operation of Generating Units within the MSS, including Generating Units that may comprise a System Unit, if such control is necessary to maintain ISO Controlled Grid reliability.
- 3.3.7 Under Frequency Load Shedding (UFLS).
- 3.3.7.1 Each agreement through which the MSS Operator undertakes to the ISO to comply with the provisions of the ISO Tariff shall describe the UFLS program for that MSS. The ISO and MSS Operator shall review the UFLS program periodically to ensure compliance with Applicable Reliability Criteria.
- 3.3.7.2 The ISO shall perform periodic audits of each MSS's UFLS system to verify that the system is properly configured for each MSS.
- 3.3.7.3 The ISO will use its reasonable endeavors to ensure that UFLS is coordinated among all MSSs and UDCs so that no MSS or UDC bears a disproportionate share of the ISO's UFLS program.
- **3.3.7.4** In compiling its UFLS program, the ISO, at its discretion, may also coordinate with other entities, review and audit their UFLS programs and systems as described in Sections 3.3.7.1 to 3.3.7.3 and Sections 4.4.3.1 to 4.4.3.3, inclusive.

Issued by: Roger Smith, Senior Regulatory Counsel

3.3.7.5 The ISO shall have the authority to direct a MSS Operator to disconnect Load from the ISO Controlled Grid if necessary to avoid an anticipated System Emergency or to regain operational control over the ISO Controlled Grid during an actual System Emergency. The ISO shall direct the MSS Operator to shed Load in accordance with the prioritization schedule developed pursuant to Section 2.3.2.6. When ISO Controlled Grid conditions permit restoration of Load, the ISO shall restore Load according to the prioritization schedule developed pursuant to Section 2.3.2.6 hereof. The MSS Operator shall restore Load internal to the MSS.

3.3.8 Electrical Emergency Plan (EEP).

- 3.3.8.1 The ISO shall in accordance with Section 2.3.2.4 hereof implement the Electrical Emergency Plan in consultation with the MSS Operator or other entities, at the ISO's discretion, when Energy reserve margins are forecast to be at the levels specified in the plan.
- 3.3.8.2 Each MSS Operator will notify its End-Use Customers connected to the MSS's Distribution System of any voluntary curtailments notified to the MSS Operator by the ISO pursuant to the provisions of the EEP.
- 3.3.8.3 If a Load curtailment is required to manage System Emergencies, the ISO will determine the amount and location of Load to be reduced and to the extent practicable, will allocate a portion to each MSS based on the ratio of its Demand (at the time of the ISO Control Area annual peak for the previous year) to total ISO Control Area annual peak Demand for the previous year taking into account system

Issued by: Roger Smith, Senior Regulatory Counsel

considerations and the MSS Operator's curtailment rights. Each MSS Operator shall be responsible for notifying its customers and Generators connected to its system of curtailments and service interruption.

- 3.3.9 System Emergency Reports: MSS Obligations.
- **3.3.9.1** Each MSS Operator shall maintain all appropriate records pertaining to a System Emergency.
- 3.3.9.2 Each MSS Operator shall cooperate with the ISO in the preparation of an Outage review pursuant to Section 2.3.2.9.
- 3.3.10 Coordination of Expansion or Modifications to MSS Facilities.

Each MSS Operator and any Participating TO with which its system is interconnected, if applicable, shall coordinate in the planning and implementation of any expansion or modifications of a MSS's or Participating TO's system that will affect their transmission interconnection, the ISO Controlled Grid or the transmission services to be required by the MSS Operator. The MSS Operator and any other Participating TO with which the MSS is interconnected shall be responsible for coordinating with the ISO.

- 3.3.11 Ancillary Service Obligations for MSS.
- 3.3.11.1 If the MSS Operator has developed and operates a system that provides its own Regulation in a manner that the ISO determines to meet WSCC Minimum Operating Reliability Criteria, including all Control Area performance criteria, that MSS Operator will have the option of either:

Issued by: Roger Smith, Senior Regulatory Counsel

- 3.3.11.1.1 selling Regulation services to the ISO and purchasing Regulation needs from the ISO or self-providing Regulation to meet its ISO Regulation obligation in accordance with the provisions of the ISO Tariff; or
- 3.3.11.1.2 continuing to provide the Regulation for its internal system Load using its own system, even though the Regulation provided by that system may not meet all requirements applicable to Regulation under the ISO Tariff, provided that the Regulation meets all applicable WSCC requirements.
- 3.3.11.2 If the MSS Operator elects to satisfy its Regulation requirements through Section 3.3.11.1.2, the ISO shall not include the internal Load of the MSS whose Regulation requirements are served in this manner in determining the responsibility of the Scheduling Coordinator representing the MSS for Regulation charges. The ISO shall monitor the provision of Regulation by an MSS Operator by monitoring the Metered Subsystem Regulation Error (MSRE) for the MSS and by testing and auditing. The MSRE is obtained by comparing the sum of the metered power flows at the MSS interface points to the sum of the MSS's power scheduled or instructed at these same interface points, and shall incorporate any necessary bias introduced by the ISO for purposes of testing or control of Ancillary Services provided by the MSS. The MSRE shall be reported to the ISO on a real time basis, and checked at five minute intervals to determine whether the MSS meets specified performance criteria. If the ISO determines based on

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

ORIGINAL VOLUME NO. I	Original Sheet No. 131-G					
monitoring of MSRE or its tests and audits that the MSS Operator						
supplying Regulation in a manner						

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000 that meets all of the criteria applicable under Section 3.3.11.1, the ISO shall assess Regulation charges on the Scheduling Coordinator representing the MSS. After the second occasion within a twelve (12) month period that an MSS Operator is found not to be supplying Regulation in a manner that meets all of the criteria applicable under Section 3.3.11.1, (a) the ISO shall assess Regulation charges three times the value of the service on the Scheduling Coordinator representing the MSS; and (b) the MSS Operator shall be barred from self-providing Regulation for the following six months and shall be required to purchase Regulation from the ISO. After the six-month period, the MSS Operator may self-provide Regulation provided it meets the criteria of Section 3.3.11.1.

- 3.3.11.3 If the MSS has developed and operates a system that carries reserves, the MSS Operator may self-provide Operating Reserve to meet the Operating Reserve obligations allocated to the Scheduling Coordinator representing the MSS with respect to the internal Load of the MSS, in accordance with the provisions of the ISO Tariff, including provisions allowing the ISO to call upon the MSS Operator to supply Energy associated with that Operating Reserve. Alternatively, the Scheduling Coordinator representing the MSS may purchase Operating Reserve from the ISO or third parties to meet all or part of its ISO Operating Reserve obligations.
- 3.3.12 Information Sharing.
- 3.3.12.1 System Planning Studies.

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

Ţ	The ISO, the MSS Operator and other Participating TOs shall share information
S	such as projected Load growth and system expansions necessary to conduct
r	necessary

Original Sheet No. 131-H

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000 system planning studies to the extent that these may impact the operation of the ISO Control Area.

3.3.12.2 System Surveys and Inspections.

The ISO and each MSS Operator shall cooperate with each other in performing system surveys and inspections to the extent these relate to the operation of the ISO Control Area.

3.3.12.3 Reports.

- 3.3.12.3.1 The ISO shall make available to each MSS Operator any public annual reviews or reports regarding performance standards, measurements and incentives relating to the ISO Controlled Grid and shall also make available, upon reasonable notice, any such reports that the ISO receives from other Participating TOs. Each MSS Operator shall make available to the ISO any public annual reviews or reports regarding performance standards, measurements and incentives relating to the MSS's Distribution System to the extent these relate to the operation of the ISO Controlled Grid.
- 3.3.12.3.2 The ISO and the MSS Operators shall develop an operating procedure to record requests received for Maintenance Outages by the ISO and the completion of the requested maintenance and turnaround times.
- 3.3.12.3.3 Each MSS Operator shall maintain records that substantiate all maintenance performed on MSS facilities which are under the Operational Control of the ISO. These records shall be made available to the ISO upon receipt of reasonable notice.

Issued by: Roger Smith, Senior Regulatory Counsel

3.3.13 Installation of and Rights of Access to MSS Facilities.

3.3.13.1 Installation of Facilities.

3.3.13.1.1 Meeting Service Obligations.

The ISO and each MSS Operator shall each have the right, if mutually agreed, on reasonable notice to install or to have installed equipment (including metering equipment) or other facilities on the property of the other, to the extent that such installation is necessary for the installing party to meet its service obligations unless to do so would have a negative impact on the reliability of the service provided by the party owning the property.

3.3.13.1.2 Governing Agreements for Installations.

The ISO and the MSS Operator shall enter into agreements governing the installation of equipment or other facilities containing customary and reasonable terms and conditions.

3.3.13.2 Access to Facilities.

Each MSS Operator shall grant the ISO reasonable access to MSS facilities free of charge for purposes of inspection, repair, maintenance, or upgrading of facilities installed by the ISO on the MSS's system, provided that the ISO must provide reasonable advance notice of its intent to access MSS facilities. Such access shall not be provided unless the parties mutually agree to the date, time and purpose of each access. Agreement on the terms of the access shall not be unreasonably withheld.

Issued by: Roger Smith, Senior Regulatory Counsel

3.3.13.3 Access During Emergencies.

Notwithstanding any provision in this Section 3.3, the ISO may have access, without giving prior notice, to any MSS Operator's equipment or other facilities during times of a System Emergency or where access is needed in connection with an audit function.

3.3.13.4 MSS Facilities under ISO Control.

The ISO and each MSS Operator shall enter into an agreement in relation to the operation and maintenance of the MSS's facilities which are under the ISO's Operational Control.

3.3.14 MSS System Unit

and/or Loads as a System Unit. Except as specifically provided in the agreement referred to in Section 3.3.1.1, all provisions of the ISO Tariff applicable to Participating Generators and to Generating Units (and, if the System Unit includes a Load, to Participating Loads), shall apply fully to the System Unit and the Generating Units and/or Loads included in it. As required by Section 5, the MSS Operator must undertake in writing to comply with all provisions of the ISO Tariff, as amended from time to time, applicable to the System Unit, including, without limitation, the applicable provisions of Section 5 and Section 2.3.2. In accordance with Section 5.1.3, the ISO will obtain control over the System Unit,

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

ORIGINAL \	VOLUME NO. I	Original Sheet No. 131-K
	not the individual Generating Unit, except for Regulation, to com	
5	i.	

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000

- **3.3.14.2** Without limiting the generality of Section 3.3.15.1, a MSS Operator that owns or has an entitlement to a System Unit:
- 3.3.14.2.1 is required to have a direct communication link to the ISO's EMS satisfying the requirements applicable to Generating Units owned by Participating Generators, or Participating Loads, as applicable, for the System Unit and the individual resources that make up the System Unit;
- 3.3.14.2.2 shall provide resource-specific information regarding the GeneratingUnits and Loads comprising the System Unit to the ISO through telemetry to the ISO'sEMS;
- 3.3.14.2.3 shall obtain ISO certification of the System Unit's Ancillary Service capabilities in accordance with Section 2.5.6 and 2.5.24 before the Scheduling Coordinator representing the MSS may self-provide its Ancillary Service obligations or bid into the ISO's markets from that System Unit;
- 3.3.14.2.4 shall provide the ISO with control over the AGC of the System Unit, except as provided in Section 3.3.11, if the System Unit is supplying Regulation to the ISO or is designated to self-provide Regulation; and
- 3.3.14.2.5 shall install ISO certified meters on each individual resource that is aggregated to a System Unit.
- 3.3.14.4 Subject to Section 3.3.14.5, the ISO shall have the authority to exercise control over the System Unit to the same extent that it may exercise control pursuant to the ISO Tariff over any other Participating Generator, Generating Unit or, if applicable, Participating Load, but the ISO shall not have the authority to direct the

Issued by: Roger Smith, Senior Regulatory Counsel

MSS Operator to adjust the operation of the individual resources that make up the System Unit to comply with directives issued with respect to the System Unit.

3.3.14.5 When and to the extent that Energy from a System Unit is scheduled to provide for the needs of Loads within the MSS and is not being bid to the ISO's Ancillary Service or Supplemental Energy markets, the ISO shall have the authority to dispatch the System Unit only to avert or respond to a circumstance described in the third sentence of Section 5.1.3 or, pursuant to Section 5.6, to a System Emergency.

Issued by: Roger Smith, Senior Regulatory Counsel

Participating Generators but shall not disclose the identity of individual Generators or the location of Generating Units.

5.5.3 Forced Outages.

Procedures equivalent to those set out in Section 2.3.3 shall apply to all Participating Generators in relation to Forced Outages.

5.6 System Emergencies.

- or controlled by a Participating Generator are (without limitation to the ISO's other rights under this ISO Tariff) subject to control by the ISO during a System Emergency and in circumstances in which the ISO considers that a System Emergency is imminent or threatened. The ISO shall, subject to Section 5.6.2, have the authority to instruct a Participating Generator to bring its Generating Unit on-line, off-line, or increase or curtail the output of the Generating Unit and to alter scheduled deliveries of Energy and Ancillary Services into or out of the ISO Controlled Grid, if such an instruction is reasonably necessary to prevent an imminent or threatened System Emergency or to retain Operational Control over the ISO Controlled Grid during an actual System Emergency.
- 5.6.2 The ISO shall, where reasonably practicable, utilize Ancillary Services which it has the contractual right to instruct and which are capable of contributing to containing or correcting the actual, imminent or threatened System Emergency prior to issuing instructions to a Participating Generator under Section 5.6.1.

Issued by: Roger Smith, Senior Regulatory Counsel

7. TRANSMISSION PRICING.

7.1 Access Charges.

All Market Participants withdrawing Energy from the ISO Controlled Grid shall pay Access Charges in accordance with this Section 7.1. Prior to the transition date determined under Section 4 of Schedule 3 to Appendix F, the Access Charge for each Participating TO shall be determined in accordance with the principles set forth in this Section 7.1 and in Section 5 of the TO Tariff. The Access Charge shall comprise of two components, which together shall be designed to recover each Participating TO's Transmission Revenue Requirement. The first component shall be based on the Transmission Revenue Requirement without any adjustment for revenues associated with Wheeling and Usage Charges ("Transmission Revenue Credits"). The second component shall be based on the proceeds of the Transmission Revenue Balancing Account (TRBA) which shall be designed to flow through to the Participating TO's Transmission Revenue Credits, which are calculated in accordance with Section 5 of the TO Tariff.

Commencing on the transition date determined under Section 4 of Schedule 3 to Appendix F, the Access Charges shall be paid by the UDC or MSS delivering the Energy for the supply of Gross Load and by Scheduling Coordinators serving Gross Load of End-Use Customers not directly connected to the facilities of a UDC or MSS and shall consist, where applicable, of a High Voltage Access Charge, a Transition Charge and a Low Voltage Access Charge. High Voltage Access Charges and Low Voltage Access Charges shall comprise two components, which together shall be designed to recover each Participating TO's High Voltage Transmission Revenue Requirement and Low Voltage Transmission Revenue Requirement, as applicable. The first component shall be based on the Transmission Revenue

Issued by: Roger Smith, Senior Regulatory Counsel

Requirement without any adjustment for revenues associated with Wheeling and Usage Charges (Transmission Revenue Credits), but including credits for Standby Transmission Revenues. The second component shall be based on the proceeds of the Transmission Revenue Balancing Account (TRBA), which shall be designed to flow through the Participating TO's Transmission Revenue. To the extent necessary, the Original Participating TO shall make conforming changes to their TO Tariff.

The High Voltage Access Charge and the Transition Charge shall be paid to the ISO based on all Energy delivered for the supply of Gross Load directly from a High Voltage Transmission Facility. The High Voltage Access Charge, the Transition Charge and the Low Voltage Access Charge for the applicable Participating TO shall be paid on all Energy delivered to all other Gross Load. The applicable High Voltage Access Charge and Transition Charge shall be assessed by the ISO as a charge for transmission service under this ISO Tariff, shall be determined in accordance with Schedule 3 of Appendix F, and shall include all applicable components of the High Voltage Access Charge and Transition Charge set forth therein. The Low Voltage Access Charge for each Participating TO is set forth in that Participating TO's TO Tariff. If a Participating TO is using the Low Voltage Transmission Facilities of another Participating TO, such Participating TO shall also be assessed the Low Voltage Access Charge of the other Participating TO. Each Participating TO shall recover Standby Transmission Revenues directly from the Standby Service Customers of that Participating TO through its applicable retail rates.

7.1.1 Publicly Owned Electric Utilities Access Charge

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

Local Publicly Owned Electric whose transmission facilities are under ISO	Local Publicly Owned Electric whose transmission facilities are under ISO Operational				
Control					

Original Sheet No. 157-A

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000 shall, if subject to the transmission ratemaking jurisdiction of the FERC, file with the FERC their proposed High Voltage Transmission Revenue Requirement, and any proposed changes thereto, under procedures determined by the FERC to be applicable to such filings and shall give notice to the ISO and to all Scheduling Coordinators of any such filing. Any Local Publicly Owned Electric Utility whose transmission facilities are under ISO Operational Control, and which is not subject to FERC's transmission ratemaking jurisdiction, shall submit its proposed High Voltage Transmission Revenue Requirement to the ISO in accordance with the procedures set forth in Schedule 3 of Appendix F. A New Participating TO that is a Local Publicly Owned Electric Utility shall submit its first proposed High Voltage Transmission Revenue Requirement to the FERC, if applicable, and to the ISO, as applicable, at the time the Local Publicly Owned Electric Utility submits its application to become a New Participating TO in accordance with the Transmission Control Agreement. To enable filings to be made on a comparable basis, the ISO will develop and post on the ISO Home Page a procedure for uniform accounting for all such High Voltage Transmission Facilities that is consistent with the FERC Uniform System of Accounts. If the High Voltage Transmission Revenue Requirement is submitted to the ISO and an objection to the submission is raised and cannot be resolved, the justness and reasonableness of the requirement will be evaluated by the Revenue Review Panel in accordance with standards established by FERC pursuant to the Federal Power Act and, if applicable, standards established by the ISO Governing Board. The role and responsibilities of the Revenue Review Panel shall be developed and approved by the ISO Governing Board. Federal power marketing

Issued by: Roger Smith, Senior Regulatory Counsel

agencies whose transmission facilities are under ISO Operational Control shall develop their High Voltage Transmission Revenue Requirement pursuant to applicable federal laws and regulations. The procedures for public participation in a federal power marketing agency's ratemaking process are posted on the federal power marketing agency's website. The federal power marketing agency's shall also post on the website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency's High Voltage Transmission Revenue Requirement. At the time the federal power marketing agency submits its application to become a New Participating TO in accordance with the Transmission Control Agreement, it shall submit its first proposed High Voltage Transmission Revenue Requirement to the FERC, if applicable, and to the ISO.

Issued by: Roger Smith, Senior Regulatory Counsel

7.1.2 High Voltage Access Charge and Transition Charge Settlement. UDCs, MSSs and Scheduling Coordinators shall be charged on a monthly basis, in arrears, the applicable High Voltage Access Charge and Transition Charge. The High Voltage Access Charge and Transition Charge for a billing period is calculated by the ISO as the product of the applicable High Voltage Access Charge or Transition Charge, as applicable, and all Energy delivered for the supply of Gross Load connected to the facilities of the UDC or MSS, or for a Scheduling Coordinator with respect to the Gross Load of End-Use Customers not directly connected to the facilities of a UDC or MSS, all Energy delivered to such Gross Load. The High Voltage Access Charge and Transition Charge are determined in accordance with Schedule 3 of Appendix F of the ISO Tariff. These rates may be adjusted from time to time in accordance with Schedule 3 to Appendix F. A UDC or an MSS that is also a Participating TO shall pay, or receive payment of, if applicable, the difference between (i) the High Voltage Access Charge Transition Charge applicable to its transactions as a UDC or MSS; and (ii) the disbursement of High Voltage Access Charge revenues to which it is entitled pursuant to Section 7.1.3.

7.1.3 Disbursement of High Voltage Access Charge Revenues.

The ISO shall collect and pay, on a monthly basis, to Participating TOs all High Voltage Access Charge revenues at the same time as other ISO charges and payments are settled. High Voltage Access Charge revenues received with respect to the High Voltage Access Charge shall be distributed to Participating TOs based on the ratio of each Participating TO's High Voltage Transmission Revenue Requirement to the sum of all the Participating TOs' High Voltage Transmission Revenue Requirements reflected in the High Voltage Access Charge.

Issued by: Roger Smith, Senior Regulatory Counsel

7.1.3.1	[Not Used]

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

First Revised Sheet No. 160 Replacing Original Sheet No. 160

ORIGINAL VOLUME IN	10.1		Replacing O	ngınar sneet i	10. 100
7.1.3.2	[Not Used]				
7.1.3.3	[Not Used]				
7.1.3.4	[Not Used]				
l					

Issued by: Roger Smith, Senior Regulatory Counsel

7.1.3.5 [Not Used]

7.1.4 Wheeling.

Any Scheduling Coordinator or other such entity scheduling a Wheeling transaction shall pay to the ISO the product of (i) the applicable Wheeling Access Charge, and (ii) the total hourly schedules of Wheeling in kilowatt-hours for each month at each Scheduling Point associated with that transaction. Schedules that include Wheeling transactions shall be subject to the Congestion Management procedures and protocols in accordance with Sections 7.2 and 7.3.

7.1.4.1 Wheeling Access Charge. The Wheeling Access Charge shall be determined by the TAC Area and transmission ownership or Entitlement associated with the Scheduling Point at which the Energy exits the ISO Controlled Grid. The Wheeling Access Charge for Scheduling Points contained within a single TAC Area, that are not joint facilities, shall be equal to the High Voltage Access Charge for the applicable TAC Area in accordance with Section 3 of Appendix F plus the applicable Low Voltage Access Charge if the Scheduling Point is on a Low Voltage Transmission Facility.

Issued by: Roger Smith, Senior Regulatory Counsel

Wheeling Access Charges shall not apply for Wheeling under a bundled non-economy Energy coordination agreement of a Participating TO executed prior to July 9, 1996.

Participating TO owns or has firm entitlement to transmission capacity exiting the ISO Controlled Grid at a Scheduling Point, the Scheduling Coordinator shall pay the ISO each month a rate for Wheeling at that Scheduling Point which reflects an average of the Wheeling Access Charge applicable to those Participating TOs, weighted by the relative share of such ownership or Entitlement to transmission capacity at such Scheduling Point. If the Scheduling Point is located at High Voltage Transmission Facilities, the Wheeling Access Charge will consist of a High Voltage Wheeling Access Charge component. Additionally, if the Scheduling Point is located at Low Voltage Transmission Facilities, the applicable Low Voltage Wheeling Access Charge component will be added to the Wheeling Access Charge. The methodology for developing the weighted average rate for Wheeling at each Scheduling Point is set forth in Appendix H.

- 7.1.4.3 Disbursement of Wheeling Revenues. The ISO shall collect and pay to Participating TOs all Wheeling revenues at the same time as other ISO charges and payments are settled. Wheeling revenues shall be disbursed by the ISO to Participating TOs based on the following:
- 7.1.4.3.1 Scheduling Point with All Participating TOs in the Same TAC Area: With respect to revenues received for the payment of High Voltage Wheeling Access Charges for Wheeling to a Scheduling Point at which all of the facilities and

Issued by: Roger Smith, Senior Regulatory Counsel

Entitlements are owned by Participating TOs in the same TAC Area, Wheeling revenues shall be disbursed to each such Participating TO based on the ratio of each Participating TO's High Voltage Transmission Revenue Requirement (less the Transmission Revenue Requirement associated with Existing Rights) to the sum of all such Participating TO's High Voltage Transmission Revenue Requirements (less the Transmission Revenue Requirement associated with Existing Rights). If the Scheduling Point is located at a Low Voltage Facility, revenues received with respect to Low Voltage Wheeling Access Charges for Wheeling to that Scheduling Point shall be disbursed to the Participating TOs that own facilities and Entitlements making up the Scheduling Point in proportion to their Low Voltage Transmission Revenue Requirements.

7.1.4.3.2 Scheduling Point without All Participating TOs in the Same TAC Area:

With respect to revenues received for the payment of Wheeling Access Charges for Wheeling to a Scheduling Point at which the facilities and Entitlements are owned by Participating TOs in different TAC Areas, Wheeling revenues shall be disbursed to such Participating TOs as follows. First, the revenues shall be allocated between such TAC Areas in proportion to the ownership and Entitlements of transmission capacity at the Scheduling Point of the Participating TOs in each such TAC Area. Second, the revenues thus allocated to each TAC Area shall be disbursed among the Participating TOs in the TAC Area in accordance with Section 7.1.4.3.1.

7.1.4.4 Information Required from Scheduling Coordinators. SchedulingCoordinators that schedule Wheeling Out or Wheeling Through transactions to a Bulk

Issued by: Roger Smith, Senior Regulatory Counsel

relevant temporary simplification measure and the date on which it will permanently cease to apply, which date shall be not less than seven (7) days after the Notice of Full-Scale Operations is issued.

7.1.4.4.3 A Notice of Full-Scale Operations shall be issued when it is posted on the ISO Internet "Home Page", at http://www.caiso.com or such other Internet address as the ISO may publish from time to time.

7.1.5 Unbundled Retail Transmission Rates.

The Access Charge for unbundled retail transmission service provided to End-Users by a FERC-jurisdictional electric utility Participating TO shall be determined by the FERC and submitted to the ISO for information only. For a Local Publicly Owned Electric Utility, retail transmission service rates shall be determined by the Local Regulatory Authority and submitted to the ISO for information only.

7.1.6 [Not Used]

Issued by: Roger Smith, Senior Regulatory Counsel

7.1.6.1 Tracking Account. If the Access Charge rate methodology implemented pursuant to Section 7.1 results in Access Charge rates for any Participating TO which are different from those in effect prior to the ISO Operations Date, an amount equal to the difference between the new rates and the prior rates for the remainder of the period, if any, during which a cost recovery plan established pursuant to Section 368 of the California Public Utilities Code (as added by AB 1890) is in effect for such Participating TO shall be

Issued by: Roger Smith, Senior Regulatory Counsel

recorded in a tracking account. The balance of that tracking account will be recovered from customers and paid to the appropriate Participating TO after termination of the cost recovery plan set forth in Section 368 of California Public Utilities Code (as added by AB 1890). The recovery and payments shall be based on an amortization period not exceeding three years in the case of electric corporations regulated by the CPUC or five years for Local Publicly Owned Electric Utilities.

- **7.1.6.2** Addition of New Facilities After ISO Implementation. The costs of transmission facilities placed in service after the ISO Operations Date shall be recovered consistent with the cost recovery determinations made pursuant to Section 3.2.7.
- 7.1.6.3 Effect on Tax-Exempt Status. Nothing in this Section shall compel any Participating TO to violate any restrictions applicable to facilities financed with tax-exempt bonds or contractual restrictions and covenants regarding the use of transmission facilities existing as of December 20, 1995.
- 7.2 Zonal Congestion Management.
- 7.2.1 The ISO Will Perform Congestion Management.
- **7.2.1.1 Transmission Congestion**. Congestion occurs when there is insufficient transfer capacity to simultaneously implement all of the Preferred Schedules that Scheduling Coordinators submit to the ISO.
- 7.2.1.2 Zone-Based Approach. The ISO will use a Zone-based approach to manage Congestion. A Zone is a portion of the ISO Controlled Grid within which Congestion is expected to occur infrequently or have relatively low Congestion Management

Issued by: Roger Smith, Senior Regulatory Counsel

the rated capacity of the path and the weighted average High Voltage Access Charge and Low Voltage Access Charge, as applicable, of the Participating TOs, the ISO may announce its intention to create a new Zone. In making this calculation, the ISO will only consider periods of normal operations. A new Zone will become effective 90 days after the ISO Governing Board has determined that a new Zone is necessary.

7.2.7.2.2 The ISO may, at its own discretion, shorten the 12-month and 90-day periods for creating new Zones if the ISO Governing Board determines that the planned addition of new Generation or Load would result in Congestion that would meet the criterion specified in Section 7.2.7.2.1.

7.2.7.2.3 [Not Used]

7.2.7.2.4 If a new transmission project or other factors will eliminate

Congestion between existing Zones, the ISO may modify or eliminate those Zones at its discretion.

7.2.7.2.5 The ISO may change the criteria for establishing or modifying Zone boundaries, subject to regulatory approval by the FERC.

7.2.7.3 Active and Inactive Zones.

7.2.7.3.1 An Active Zone is one for which a workably-competitive

Generation market exists on both sides of the relevant Inter-Zonal Interface for a substantial portion of the year so that Congestion Management can be effectively used to

Issued by: Roger Smith, Senior Regulatory Counsel

will be paid or charged based on the Adjustment Bids or Imbalance Energy bids that they have provided to the ISO. The net redispatch cost will be recovered for each Settlement Period through the Grid Operations Charge, which shall be paid to the ISO by all Scheduling Coordinators in proportion to their metered Demands within the Zone with Intra-Zonal Congestion, and scheduled exports from the Zone with Intra-Zonal Congestion to a neighboring Control Area, provided that, with respect to Demands within an MSS in the Zone and scheduled exports from the MSS to a neighboring Control Area, a Scheduling Coordinator shall be required to pay Grid Operations Charges only with respect to Intra-Zonal Congestion, if any, that occurs on an interconnection between the MSS and the ISO Controlled Grid, and with respect to Intra-Zonal Congestion that occurs within the MSS, to the extent the Congestion is not relieved by the MSS Operator.

7.4 Transmission Losses.

7.4.1 Obligation to Provide for Transmission Losses.

Each Scheduling Coordinator shall ensure that it schedules sufficient Generation to meet both its Demand and Transmission Losses responsibilities as determined in accordance with this Section 7.4.

7.4.2 Determination of Transmission Losses.

The total Demand that may be served by a Generating Unit, in a given hour, taking account of Transmission Losses, is equal to the product of the total Metered Quantity of that Generating Unit in that hour and the Ex Post Generation Meter Multiplier calculated by the ISO in the hour for that Generator

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
FERC ELECTRIC TARIFF
ORIGINAL VOLUME NO L

Sheet	No.	183
-------	-----	-----

Effective: May 30, 2000

location except in accordance with Section 7.4.3. The Ex Post Generation Meter Multiplier shall be

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

Original Sheet No. 183-A

greater than one (1) where the Generating Unit's contribution to the ISO

Controlled Grid reduces Transmission Losses and shall be less than one (1) where
the Generating Unit's contribution to the system increases Transmission Losses. All
Generating Units supplying Energy to the ISO Controlled Grid at the same
electrical bus shall be assigned the same Ex Post Generation Meter Multiplier.

Issued by: Roger Smith, Senior Regulatory Counsel

8.4 Calculation and Adjustment of the Grid Management Charge.

The Grid Management Charge shall be calculated by summing the Start Up and Development Costs, the Operating Costs, the Financing Costs and the Operating and Capital Cost Reserves Cost for each fiscal year. The sum of the calculation provided in this section shall be adjusted annually, or over such lesser period as approved by the ISO Governing Board and filed with the FERC, to reflect any variance between forecast and actual costs for the previous year or period, or the inability to recover from a Scheduling Coordinator its share of the Grid Management Charge, or any under-forecast of annual metered Demand for the previous year or period or any surplus revenues from the previous year or period as defined under Section 8.5. The result of the Grid Management Charge calculation, adjusted for variances as set out in this Section 8.4 shall then be divided by the forecast annual or periodic volume in MWh of Energy to establish a Grid Management Charge rate in \$/MWh, which will be payable by Scheduling Coordinators as set out in Section 8.3.

8.5 Operating and Reserve Account.

Revenues collected to fund Operating Reserves shall be deposited in an Operating and Reserve Account until such account reaches a level specified by the ISO Governing Board. If the Operating and Reserve Account is fully funded, surplus revenues will be considered revenues in the next fiscal year's operating budget.

8.6 Transition Mechanism.

During the ten-year transition period described in Section 4 of Schedule 3 to Appendix F, the Original Participating TOs collectively shall pay to the ISO each year

Issued by: Roger Smith, Senior Regulatory Counsel

an amount equal to the sum annually, for all New Participating TOs, of: (a) the difference between (i) the amount that the New Participating TO pays for Grid Management Charges in accordance with Schedule 1 of Appendix F; and (ii) the amount that the New Participating TO would have paid for Grid Management Charges if the participant had not become a New Participating TO; reduced by (b) the amount, if any, by which the cost of High Voltage Transmission Facilities associated with deliveries of Energy to Gross Loads in the Service Area of the Participating TO is reduced by the implementation of the High Voltage Access Charge described in Schedule 3 to Appendix F; or increased by (c) the amount, if any, by which the cost of High Voltage Transmission Facilities associated with deliveries of Energy to Gross Loads in the Service Area of the Participating TO is increased by the implementation of the High Voltage Access Charge described in Schedule 3 to Appendix F. Responsibility for such payments shall be allocated to Original Participating TOs in accordance with Schedule 3 to Appendix F. Amounts payable by Original Participating TOs under this section shall be recoverable as part of the Transition Charge calculated in accordance with Schedule 3 of Appendix F. Amounts received by the ISO under this section shall be disbursed to New Participating TOs based on the ratio of each New Participating TO's net increase in costs in the categories described in the first sentence of this section, to the sum of the net increases in such costs for all New Participating TOs.

Issued by: Roger Smith, Senior Regulatory Counsel

9. FIRM TRANSMISSION RIGHTS

9.1 General

9.1.1 Commencing in 2000, on the effective date established by the ISO Governing Board, the ISO shall make FTRs available in the amounts determined in accordance with Section 9.3, with the rights and other characteristics described in Sections 9.2, 9.6, 9.7 and 9.8, and through the processes described in Section 9.4. Proceeds of the ISO's auction of FTRs shall be distributed as described in Section 9.5. The owners of FTRs shall be entitled to share in Usage Charge revenues associated with Inter-Zonal Congestion in accordance with Section 9.6, and to scheduling priority in the event of congestion in the Day-Ahead Market, as described in Section 9.7. For the purpose of Section 9, the term "Zone" shall be construed to mean both "Zone" and "Scheduling Point."

9.2 Characteristics of Firm Transmission Rights

9.2.1 Each FTR shall be defined by a transmission path from an originating Zone to a contiguous receiving Zone. Each FTR shall entitle the FTR Holder to a share of Usage Charges attributable to Inter-Zonal Congestion for transfers on that path from the designated originating Zone to the designated receiving Zone in accordance with Section 9.6. An FTR is a right in one direction only. An FTR Holder shall not be entitled to share in (i) Usage Charges attributable to Inter-Zonal Congestion from the designated receiving Zone to the designated originating Zone; or (ii) Usage Charges payable in accordance with Section 7.3.1.5.1 to a Scheduling Coordinator that counter-schedules from the designated originating Zone to the designated receiving Zone.

Issued by: Roger Smith, Senior Regulatory Counsel

- participating in the ISO's auction of FTRs, as described in Section 9.4, or by purchasing FTRs in secondary markets. To participate in the ISO's auction of FTRs, an entity must either be a certified Scheduling Coordinator or have met financial requirements equivalent to the financial certification criteria required of all Scheduling Coordinators. An entity may not acquire FTRs with a total value that exceeds the financial security proved by that entity to the ISO. In addition, an FTR Bidder must have, or have access to, the necessary technical equipment to participate in the electronic auction.
- 9.2.7 All entities which acquire FTRs by participating in the ISO's auction of FTRs, as described in Section 9.4, directly from the ISO pursuant to Section 9.4.3, or by purchasing FTRs in secondary markets, must register as an FTR Holder with the ISO. To complete this registration, the FTR Holder must notify the ISO, through the form specified for that purpose by the ISO, of all Affiliates of the FTR Holder that are themselves FTR Holders or Market Participants. The requirement that an FTR Holder notify the ISO of all Affiliates that are FTR Holders or Market Participants is continuing for as long as the FTR Holder owns FTRs, and FTR Holders must provide the ISO with supplemental notification concerning FTR Holders and/or Market Participants that become affiliated with the FTR Holder or Affiliates that subsequently become FTR Holders or Market Participants in order to satisfy this requirement.

9.3 Maximum Number of Firm Transmission Rights

- **9.3.1** On each Inter-Zonal Interface and direction combination for which FTRs are issued, the ISO shall issue a number of FTRs that is less than or equal to the difference between:
 - (i) The WSCC approved path rating of the interface in the direction from the originating Zone to the receiving Zone or, if the interface has not received a WSCC approved rating, a rating determined by a methodology that is consistent with the WSCC's rating methodology; and

Issued by: Roger Smith, Senior Regulatory Counsel

(ii) The portion of the transfer capability of the interface available for transmission scheduling under Existing Contracts as Existing Rights.
and ensures the ISO's ability to honor all of its FTRs simultaneously under normal operating conditions.

9.4 Issuance of Firm Transmission Rights by the ISO by Auction

- 9.4.1 The ISO shall make FTRs available by conducting an annual primary auction of FTRs, commencing approximately two months before the beginning of the term of the FTRs; provided; however that for the initial FTR release, the primary auction shall be as determined by the ISO Governing Board. The auction of FTRs shall be a simultaneous multiround, clearing price auction conducted separately and independently, as set forth in Section 9.4.2, for each FTR Market. In addition, if the ISO Governing Board decides to make available, between annual auctions, FTRs in addition to those that were purchased in the last annual auction, the ISO may conduct additional auctions of such FTRs in accordance with Section 9.4.2. The term of such FTRs shall only be for the remaining duration of the FTR term defined for the primary auction applicable to the year during which they were issued.
- **9.4.2** The ISO shall conduct the auction of FTRs through the following procedures:
- **9.4.2.1** At least thirty (30) days prior to the scheduled start of the auction, the ISO shall post on the ISO Home Page the following information:
 - (i) the number of FTRs to be issued for each FTR Market;
 - (ii) the starting bid price at which FTRs will be made available in each FTR Market in the first round of the auction, which price

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
FERC ELECTRIC TARIFF
ODICINAL VOLUMENO I

Third Revised Sheet No. 189-C

ORIGINAL VOLUME NO. I	Replacing Second Revised Sheet No. 189-C			
	will be set in each FTR Market at a level equal to the greater			
	of (a) \$100 per MW-year; (b) twenty (20) percent of the ratio			

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000

- (10) business days of receiving an invoice from the ISO by making payment to the ISO Clearing Account in accordance with Section 11.10. If the FTR Bidder fails to make timely payment of the full amount due, the ISO may enforce any guarantee, letter of credit or other credit support provided by the defaulting FTR Bidder in accordance with Section 9.4.2.7 and, if the ISO is required to institute proceedings to collect any unpaid amount, the defaulting FTR Bidder shall pay interest on the unpaid amount at the ISO Default Interest Rate for the period from the Payment Date until the date on which payment is remitted to the ISO Clearing Account.

 9.4.2.8 The ISO shall post on the ISO Home Page the prices at which FTRs are sold in each FTR Market through the primary auction.
- Appendix F, a New Participating TO shall receive FTRs for Inter-Zonal Interfaces to which the transmission facilities and Converted Rights for Inter-Zonal Interfaces that the New Participating TO turns over to the ISO's Operational Control give it transmission rights. The amount of FTRs will be determined when the Transmission Control Agreement is executed and shall be commensurate with the transmission capacity the New Participating TO is turning over to ISO Operational Control. FTRs issued in accordance with this section shall entitle the FTR Holder to receive Usage Charge revenues and to priority in the scheduling of Energy in the Day-Ahead Market in accordance with the provisions of the ISO Tariff. FTRs associated with Converted Rights shall terminate on the earlier of termination of the Existing Contract or the end of the tenyear transition period.

Issued by: Roger Smith, Senior Regulatory Counsel

9.5 Distribution of Auction Revenues Received by the ISO for Firm Transmission Rights

- 9.5.1 For each Inter-Zonal Interface and direction for which an FTR is defined, the total proceeds received by the ISO through the auction described in Section 9.4 shall be allocated and paid by the ISO to the Participating TO that is entitled in accordance with Section 7.3.1.6 to receive Usage Charge revenues with respect to the corresponding Inter-Zonal Interface. Each Participating TO shall credit its FTR auction proceeds against its high voltage TRBA if the FTR is for a High Voltage Transmission Facility or against its low voltage TRBA if the FTR is a for a Low Voltage Transmission Facility.
- 9.5.2 In the event the transmission facilities or rights making up an Inter-Zonal Interface with respect to which FTRs are defined are owned by more than one Participating TO, the proceeds of the auction of such FTRs shall be allocated to those Participating TOs who auction FTRs in proportion to the FTRs associated with their Inter-Zonal Interface as of the date of the FTR auction compared to all FTRs auctioned for such Inter-Zonal Interface.

9.6 Distribution of Usage Charges to FTR Holders

- **9.6.1** The FTR Holder shall be entitled to receive from the ISO a portion of the total Congestion revenues related to Inter-Zonal Congestion calculated by the ISO in the Day-Ahead Market and collected by the ISO with respect to the Inter-Zonal Interface and direction combination for which the FTR was defined. This portion equals the Usage Charge calculated by the ISO in the Day-Ahead Market for the transfer of 1 MW from the originating Zone to the receiving Zone during each hour in which Usage Charges apply, multiplied by the number of FTRs owned by that FTR Holder, subject to adjustment in accordance with Section 9.6.3.
- **9.6.2** In addition, an FTR holder shall be entitled to receive a portion of the additional net Usage Charges related to Inter-Zonal Congestion calculated by the ISO in the Hour-Ahead

Issued by: Roger Smith, Senior Regulatory Counsel

Market and collected by the ISO with respect to the Inter-Zonal Interface and direction combination for which the FTR was defined. The FTR Holder shall receive a portion of the net Usage Charges in the Hour-Ahead Market proportionate to the share of the Usage Charges it received in the Day-Ahead Market in accordance with Section 9.6.1.

- 9.6.3 When the Day Ahead scheduling capability of an Inter-Zonal Interface and direction is less than its scheduling capacity, determined in accordance with Section 9.3, prior to the Day-Ahead Market, the entitlements of FTR Holders associated with that FTR Market to Usage Charge revenues shall not be reduced until and unless the entitlements of Participating TOs associated with that FTR Market to Usage Charge revenues in accordance with Section 7.3.1.6 have been reduced to zero. In that event, the financial entitlements associated with the corresponding FTRs shall be multiplied by a factor equal to the amount of scheduling capability available to holders of the remaining FTRs divided by the number of such FTRs. When the Day Ahead scheduling capability of an Inter-Zonal Interface and direction is greater than its scheduling capacity, determined in accordance with Section 9.3, prior to the Day-Ahead Market, the entitlements of FTR Holders associated with that FTR Market to Usage Charge revenues shall not be increased.
- 9.6.4 When the congestion Usage Charges calculated and collected by the ISO from the Hour-Ahead Market with respect to transfers across an Inter-Zonal Interface in a particular direction result in a net obligation to the ISO, in the circumstances described in Section 7.3.1.7, the provisions of this Section 9.6 shall continue to apply, and FTR Holders shall be required to pay the ISO these amounts.

Issued by: Roger Smith, Senior Regulatory Counsel

9.6.5 The ISO will calculate the congestion Usage Charge revenues to be credited or debited to the account of each FTR Holder on an hourly basis. Such calculation will identify the Inter-Zonal Interface and direction to which each credit or debit applies.

9.7 Scheduling Priority of FTR Holders

- 9.7.1 FTRs will not affect the ISO's dispatch and operation of the ISO Controlled Grid except that each FTR Holder will have a priority, as described in this Section 9.7, for the scheduling of Energy in the Day-Ahead Market when an Inter-Zonal Interface experiences Inter-Zonal Congestion in the direction for which its FTR is defined. Any FTRs not used in Preferred Schedules in the Day-Ahead Market for any hour have no scheduling priority for that hour in the trading day. FTR Holders shall have no scheduling priority in the Hour-Ahead Market or in real time operations.
- 9.7.2 When Inter-Zonal Congestion is experienced or projected to be experienced in the Day-Ahead Market, the ISO shall first attempt to relieve the Inter-Zonal Congestion using Adjustment Bids submitted by Scheduling Coordinators in accordance with Section 7.2.4.
 9.7.2.1 If the ISO is unable to relieve the Day-Ahead Inter-Zonal Congestion using Adjustment Bids, then the ISO will allocate Day-Ahead inter-zonal transmission capacity first to schedules of Market Participants that are using Existing Contract rights that have higher scheduling priority than Converted Rights capacity and second to Market Participants who hold FTRs and have indicated to the ISO that they wish to exercise their scheduling priority option. The ISO will allocate any remaining transmission capacity to remaining Market Participants' schedules pro rata.

Issued by: Roger Smith, Senior Regulatory Counsel

- 9.7.3 When the scheduling capability of an Inter-Zonal Interface is less than or greater than its normal scheduling capability prior to the Day-Ahead Market, as described in Section 9.6.3, the priority scheduling rights of FTR Holders, as described in Section 9.7.2, shall remain constant (in MWs) to the extent that the total scheduling rights of FTR Holders do not exceed the total Interface scheduling capability of the associated Inter-Zonal Interface after adjustments have been made for transmission capacity allocated to Existing Contract rights that have higher scheduling priority than Converted Rights. If the total Interface scheduling capability, adjusted for transmission capacity allocated to Existing Contract rights that have higher scheduling priority than Converted Rights, is less than the total of all scheduling capability represented by FTR holders who have chosen to exercise the FTR scheduling priority option, scheduling capability shall be allocated to FTR Holders pro rata.
- **9.7.4** The scheduling priority of FTR Holders:
 - (i) Shall not apply in the Hour-Ahead Market or in real-time dispatch and operation of the ISO Controlled Grid;
 - (ii) Shall not apply to any transfer of Energy other than a transfer across the Inter-Zonal Interface in the direction for which the FTR was defined during the hour or hours during which the circumstances described in Section 9.7.2.1 apply; and
 - (iii) Shall not be transferable, except in connection with a transfer of the FTR that is registered with the ISO, as described in Section 9.8.

9.8 Assignment of Firm Transmission Rights

9.8.1 An FTR may be assigned, sold, or otherwise transferred by the FTR Holder to any entity eligible to be an FTR Holder in full MW increments, either for the entire term of the FTR or for any portion of that term providing, however, that any such transfer shall be in full hour

Issued by: Roger Smith, Senior Regulatory Counsel

increments that correspond to the FTR issued to the FTR Holder. Both the FTR Holder of record and the entity to which the FTRs have been transferred shall register the transfer of the FTR with the ISO by notifying the ISO through the form specified for that purpose by the ISO, and within the number of business days following the transfer published by the ISO on the ISO Home Page and WEnet but no later than such time as the ISO shall specify before the deadline applicable to scheduling Energy in the Day-Ahead Market, of (i) the identity of the FTR Holder of record; (ii) the identity of the entity to which the FTRs have been transferred; (iii) the quantity and identification numbers of the FTRs being transferred; (iv) the portion of the term of the FTR for which they are transferred; (v) the price at which the FTRs are being transferred; and (vi) whether the transfer of FTRs is subject to any conditions. The entity to which the FTRs have been transferred must also notify the ISO of all entities with which the transferee is affiliated that are FTR Holders or Market Participants as defined in the ISO Tariff, pursuant to Section 9.2.7. After the ISO receives such notices, the transferee shall be considered the FTR Holder of record with respect to the portion of the term of the FTR that is transferred. In order to use the Scheduling Priority of an FTR, pursuant to section 9.7, an FTR must be registered with the ISO.

- **9.8.2** The ISO shall publish on the ISO Home Page such information concerning the concentration of ownership of FTRs in each FTR Market as determined by the ISO Board of Governors from time to time.
- 9.8.3 To facilitate the operation of secondary markets in FTRs, the ISO shall post on WEnet and the ISO Home Page: (i) the identity of entities that hold FTRs that have been registered with the ISO, together with the quantity of FTRs held by such entities in each FTR Market and the path rating of the interface; and (ii) the name and a contact telephone number or telecopy number of any entity that operates a secondary market in FTRs and that requests the ISO to post such information. The ISO

Issued by: Roger Smith, Senior Regulatory Counsel

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

ORIGINAL VOLUME NO. I	Original Sheet No. 189-O
shall also post the prices at which FTRs are transferred through secondary m	arket transactions
and shall indicate whether such transfers are conditional.	
	<u> </u>

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: March 31, 2000 Effective: May 30, 2000